

## Case 2811

***Catocala connubialis* Guenée, 1852 (Insecta, Lepidoptera): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of the Connubial Underwing moth *Catocala connubialis* Guenée, 1852. This name is threatened by its unused senior synonym *Phalaena amasia* Smith, 1797 which was long thought to be invalid as a junior secondary homonym of *Catocala amasia* (Esper). However, it is now known that Esper's name was not published until 1804. Smith's name *amasias* is therefore available and it is now proposed that it be suppressed.

1. In 1797, J.E. Smith (p. 179) described and named as *Phalaena amasia* a new species of *Catocala* Schrank, 1802 from Virginia and Georgia. He figured two specimens on pl. xc, a male (upper right) and a female (lower left), stating: 'In this species the sexes differ more than usual in the colour of their upper wings. From the beautiful male our character is taken, according to general custom in insects as well as birds; but it applies also to the female as much as possible'. Early Nearctic *Catocala* workers recognized that the two specimens figured as *amasias* were not conspecific. The name *amasias* was subsequently restricted to the male upon which Smith had based his diagnosis. Smith's figured female was referred to *Catocala similis* Edwards, 1864 (see Grote & Robinson, 1866; Hulst, 1884; Smith, 1893; Dyar, 1903).

2. At the close of the 18th century, in *Die Schmetterlinge in Abbildungen...*, Esper described a *Catocala* species from Turkey as *Noctua amasia*. Throughout the 19th and 20th century literature the date of Esper's work was cited as 1796 (see Hampson, 1913, p. 115; Nye, 1975, p. 198); Sherborn & Woodward (1901, p. 139) accepted this date. Only recently has it been shown (Heppner, 1981, p. 253) that both the text (Theil 4, Band 2, Abschnitt 2, p. 55) and illustrations (Theil 4, Band 2, Abschnitt 1, pl. 194, figs. 1-2) comprising the description of *amasias* Esper were in fact not published until 1804.

3. In his catalogue of the NOCTUIDAE, Hampson (1913) placed *amasias* Esper as a synonym of *Phalaena puerpera* Giorna, 1791 (p. 104), and *amasias* Smith as a species in the genus *Ephesia* Hübner, 1818 (p. 11). In the Seitz volumes, Warren (1914) followed Hampson's treatment of these two taxa.

4. In their revision of the Nearctic *Catocala*, Barnes & McDunnough (1918, p. 17) showed that Hampson's division of *Catocala* into separate genera on the basis of adult leg spination was without merit, and placed *Ephesia* and Hampson's other genera as synonyms of *Catocala*. Nearctic workers (e.g. McDunnough, 1938; Forbes, 1954; Sargent, 1976; Hodges, 1983; Covell, 1984) have universally followed Barnes & McDunnough's generic treatment; indeed, *Catocala* is the only genus used by most Nearctic workers since the latter part of the 19th century. In the post-Hampson

Palaearctic literature, *Ephesia* was treated as a valid genus by some authors (e.g. Draudt, 1939; Forster & Wohlfahrt, 1971) or subgenus (Agenjo, 1959). However, more recent Palaearctic workers (e.g. Martin, 1980; Inouye et al., 1982; Sugi et al., 1987) have treated *Ephesia* as a synonym of *Catocala*. Poole, in his *Catalogue of the World Noctuidae* (1989), transferred to *Catocala* all taxa originally described in *Ephesia* and the other Hampsonian genera.

5. Beutenmüller (1907, p. 146) was apparently the first Nearctic worker to address the secondary homonymy involving *amasia* that occurs by treating *Catocala* as the only valid generic name. He resolved this homonymy by citing *amasia* Smith, 1797 as preoccupied by *amasia* Esper which he thought to date from 1786. He then placed *Catocala amasia* Smith under the synonymy of *Catocala cordelia* Edwards, 1880 (p. 59). Barnes & McDunnough (1917, 1918) followed Beutenmüller's taxonomic treatment, differing only in dating *amasia* Esper to 1796. McDunnough (1938, p. 118) later moved *cordelia* to the synonymy of *Catocala connubialis* Guenée, 1852 (p. 105), and it is now widely recognized that *cordelia* and *amasia* were names given to a morph that can be bred from *connubialis* females (and vice versa).

6. Since 1938 *connubialis* Guenée has appeared exclusively as the specific name in the Nearctic *Catocala* literature. The name has been used in the two subsequent descriptions of new forms for the species (Brower, 1940; Muller, 1960) and other taxonomic works on *Catocala* (Gall & Hawks, 1990); a book devoted to *Catocala* (Sargent, 1976); three principal monographs and catalogues treating moths (Forbes, 1954; Hodges, 1983; Poole, 1989); a field guide to moths (Covell, 1984); regional faunistic treatments (Tietz, 1952; Ferguson, 1953; Kimball, 1965; Brower, 1974; Nelson & Loy, 1983); the experimental zoological literature (Sargent, 1974; Sargent & Owen, 1975; Gall, 1991); and throughout numerous shorter reports on *Catocala* distributions and life histories including the annual *Season Summaries* of the Lepidopterists' Society. Hodges's (1983) list cites '*amasia* (J.E. Smith, 1797), part' under the synonymy of *Catocala similis*, but omits *amasia* from the synonymy of *connubialis*, and Poole's (1989) catalogue fails to mention J.E. Smith's name. The original edition (Holland, 1903) of the *Moth Book* treated *amasia* Smith as a valid nominal species, and several reprintings during the first half of the 20th century retained the old 1903 taxonomy. Hence, the reprinted *Moth Book* fell badly out of step with taxonomic treatments reported in the literature, as was acknowledged in the prefaces and introductions to later volumes. Only in 1968, when Holland's tome was republished with taxonomic emendations by A.E. Brower, was the name *connubialis* Guenée finally substituted for *amasia* Smith. Nevertheless, it is clear that the *Moth Book* reprintings had no significant impact on the already long accepted usage of the name *connubialis*.

7. As outlined above, the name *amasia* Smith, 1797 has since the works of Beutenmüller (1907) and Barnes & McDunnough (1917, 1918) been erroneously treated as a junior, rather than senior, secondary homonym of *amasia* Esper in the genus *Catocala*. To reintroduce *amasia* Smith as a senior synonym of *connubialis* Guenée, 1852 would upset long-standing nomenclatural usage.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *amasia* Smith, 1797, as published in the binomen *Phalaena amasia*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (2) to place on the Official List of Specific Names in Zoology the name *connubialis* Guenée, 1852, as published in the binomen *Catocala connubialis*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *amasia* Smith, 1797, as published in the binomen *Phalaena amasia* and as suppressed in (1) above.

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